

Title (en)

METAL ARTICLES BRAZED WITH A HOMOGENEOUS, DUCTILE COBALT BASED BRAZING MATERIAL

Publication

EP 0020965 B1 19880831 (EN)

Application

EP 80102547 A 19800509

Priority

US 5000679 A 19790618

Abstract (en)

[origin: US4260666A] Brazing of metal parts employing a homogeneous, ductile, filler metal foil is disclosed. The brazing foil, useful for brazing cobalt based alloys, has a composition consisting essentially of 0 to about 4 atom percent iron, 0 to about 26 atom percent chromium, 0 to about 20 atom percent nickel, 0 to about 4 atom percent tungsten, 0 to about 4 atom percent molybdenum, 0 to about 20 atom percent boron, 0 to about 12 atom percent silicon, 0 to about 2 atom percent carbon and the balance essentially cobalt and incidental impurities. In addition to containing the foregoing elements within the above-noted composition ranges, the composition must be such that the total of iron, chromium, nickel, tungsten, molybdenum and cobalt ranges from about 75 to 85 atom percent and the total of boron, silicon and carbon ranges from about 15 to 25 atom percent. The ductile foil permits fabrication of preforms of complex shapes which do not require binders and/or fluxes necessary for brazing powders presently used to braze cobalt and nickel base alloys.

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CPC (source: EP US)

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Citation (examination)

Welding Journal, 231, Vol. 57, No. 7 (1978), pages 33 to 38; Undated brochure: "Metglas R., Ductile Foil Filler Metals"

Cited by

EP0070383A1; DE3106607A1; EP0342506A1; CN106736036A; US6165290A; CN1113725C; WO9961195A1; WO2013115887A3

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